EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
UT	D041075896

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Syro Steel Company - Western Division	950 West 400 South

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Centerville	UT	84104	Davis	011	01

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
40 54 48.N	111 53 30. W	XX A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
06 / 10 / 85 (MONTH DAY YEAR)	XX ACTIVE ☐ INACTIVE	1966 (BEGINNING YEAR) | 1974 (ENDING YEAR) ☐ UNKNOWN

The ponds were closed in 1974 but the facility is still in operation.

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
XX E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Muhammad Slam	Engineer	UBS&HW	801) 533-4145
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Joel Hebdon	Geologist	UBS&HW	801) 533-4145
James Salmon	Scientist	UBS&HW	801) 533-4145
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Gerald Koontz	Manager	950 West 400 South Centerville, UT 84014	801) 292-4461
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
XX PERMISSION ☐ WARRANT	0955	Sunny 82°F, 45% humidity and light winds from southwest

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Muhammad Slam	Utah Health Dept. Bureau of Solid & Hazardous Waste	(801) 533-4145

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Loretta Pickerell	Ut. Hlth. Dept.	Bureau of Solid & Hazardous Waste	801-533-4145	07 / 12 / 85 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
UT	D 041075896

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
- TONS: 5760
- CUBIC YARDS:
- NO. OF DRUMS:

03 WASTE CHARACTERISTICS (Check all that apply)
- ☒ A. TOXIC
- ☒ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	5760	Tons	The waste consists of acid,
OLW	OILY WASTE			Heavy metals and contaminated
SOL	SOLVENTS			soil.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
ICC	INORGANIC CHEMICALS			
ACD	ACIDS	Unknown	-	Spent Pickle Liquor
BAS	BASES			
MES	HEAVY METALS	Unknown	-	Cadmium, chromium, iron, zinc, arsenic

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Ferrous Sulfate		Surface Impoundment	Not	known
MES	Ferric Sulfate		Surface Impoundment	Not	known
MES	Lead Sulfate		Surface Impoundment	Not	known
MES	Zinc Sulfate		Surface Impoundment	Not	known
	Syro Steel states that approximately 1500 gallons of spent Pickle Liquor				
	is generated each month. This spent liquor was dumped into surface				
	impoundments on-site during 1966-74.				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Hydrochloric Acid	7647-01-0	FDS		
FDS	Sulfuric Acid	7664-93-9	FDS		
FDS	Cadmium	7440-43-9	FDS		
FDS	Chromium	7440-47-3	FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

(1) Utah Bureau of Solid and Hazardous Waste files.
(2) Data provided by Syro Steel Company.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: UT | 02 SITE NUMBER: D041075896

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 32,660
02 [X] OBSERVED (DATE: April 1985) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
Population taken from U.S. Census tract map (1984) and covers a 3 mile radius from the site. Third and fourth quarters groundwater monitoring data provided by Syro Steel indicate heavy metal contamination in downgradient wells.

01 [X] B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 2670
02 [X] OBSERVED (DATE: 6/10/85) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
The surface water samples taken on June 10, 1985 indicate heavy metal contamination. Utah Division of Water Resources record indicate that surface water is being used for irrigation. There are about 1780 acres of farm land within 3 mile radius. About 2670 (1780 x 1.5) people may be affected by contamination.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED:
02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Not applicable at the time of assessment.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED:
02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Not applicable at the time of assessment.

01 [X] E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: 4162
02 [X] OBSERVED (DATE: Aug. 1973) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
Mr. Liston (a farmer) has alleged that his livestock died after drinking water contaminated by Syro Steel. There are 4162 people (U.S. census tract) within one mile radius of site who may be affected.

01 [X] F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 0.7 (Acres)
02 [X] OBSERVED (DATE: 9/26/84) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
The soil sample data provided by Syro Steel indicate heavy metal contamination. Approximately 0.7 acres of soil is contaminated (taken from site map).

01 [X] G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 32,660
02 ☐ OBSERVED (DATE:) [X] POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Utah Division of Water Rights record indicates that nearest private well is within 1/4 mile and the Aquifer of concern is being used for drinking water. Potential of Groundwater contamination appears high.

01 [X] H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: 100
02 ☐ OBSERVED (DATE:) [X] POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Potential exist if workers come in contact with the waste and/or contaminated soil.

01 [X] I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: 4162
02 [X] OBSERVED (DATE: Aug 1973) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
Mr. Liston (a farmer) in 1973 alleged that his livestock died after drinking surface water contaminated by Syro Steel. There are 4162 people in one-mile radius who could be affected by contamination.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
UT	D041075896

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 X J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: 04/02/83) ☐ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION
Utah Bureau of Water Pollution observed a major spill which occurred on-site and had flowed across the adjacent field west of the site. It caused all vegetation in its path to be killed or severely distressed.

01 X K. DAMAGE TO FAUNA — 02 X OBSERVED (DATE: Aug. 1973) ☐ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
Mr. Liston (a farmer) in 1973 estimated his losses from calves and cows at $1800.00, because of high metals in the irrigation ditch caused by Syro Steel. Farmington Bay Bird Refuge is within one mile west of the site.

01 XX L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) X POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for contamination of plant food for cattle, horses, sheep and/or water fowl (on bird refuge).

01 X M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 X OBSERVED (DATE: 04/02/82) ☐ POTENTIAL X ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4162 — 04 NARRATIVE DESCRIPTION
Bureau of Water Pollution observed a major spill which occurred on-site and flowed across the adjacent field. There are 4162 people (from U.S. Census Tract) within one mile radious of site.

01 X N. DAMAGE TO OFFSITE PROPERTY — 02 XX OBSERVED (DATE: 12/01/75) ☐ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION
EPA investigators (Castor & Crosby) inspected Syro Steel in December of 1975 and reported "The groundwater Table is sufficiently high to induce further contamination. The material is spreading into other areas and Syro Steel is buying property as it becomes contaminated."

01 X O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 X OBSERVED (DATE: April 1974) ☐ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION Contamination of sewer occured in 1974 by direct discharge of spent Pickle Liquor. Contamination of drainage ditch was observed October 2, 1975. Syro Steel exceeded their limits of allowable heavy metals in drainage ditch and violated NPDES limits.

01 X P. ILLEGAL/UNAUTHORIZED DUMPING — 02 X OBSERVED (DATE: 1/19/76) ☐ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION
EPA issued a Notice of Violation and Order of Compliance alleging that Syro is in violation of their NPDES permit for illegally discharging higher concentration of heavy metals into the ditch.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 32,662

IV. COMMENTS

There are 32,662 people within 3-mile radius of site. These people could be affected by the site contamination.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1. Bureau of Solid & Hazardous Waste files.
2. Bureau of Water Pollution Control Files
3. U.S. census tract map 1980.
4. Utah Division of Water Resources Record.
5. James Schoenfield, State Veterinarian File.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION
01 STATE: UT | 02 SITE NUMBER: 0041075896

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
X A. NPDES	UT0021474	4/3/74	Dec. 1976	Syro violated NPDES Permit and was issued NOV by EPA
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
X E. RCRA INTERIM STATUS	UTD041075896	1980	up to date	Undergoing closure
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
X A. SURFACE IMPOUNDMENT (2)	5,760	Tons
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- X H. OTHER (Specify) Lime Neutralization

05 OTHER
- X A. BUILDINGS ON SITE

06 AREA OF SITE: About 1 (Acres)

07 COMMENTS
Syro Steel has two abandoned surface impoundments on-site which were operated 1966-74. Another surface Impoundment which is regulated under RCRA interim status is currently undergoing closure.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)
☐ A. ADEQUATE, SECURE ☐ B. MODERATE X C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

The contaminants have migrated off-site.

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.
Both the Surface Impoundments were unlined and the Groundwater shows contamination by heavy metals.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: X YES ☐ NO
02 COMMENTS
The contaminants have migrated off-site.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

1. Bureau of Solid and Hazardous Waste files.
2. Bureau of Water Pollution Control files.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
UT	D041075896

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☒	B. ☐	C. ☐
D. ☒	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 2 (mi)
B. 1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 32,660

03 DISTANCE TO NEAREST DRINKING WATER WELL 1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
6-12 (ft)	Northwest	6-12 (ft)	400 GPM (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Utah Division of Water Resources
Record indicates that there are 100 private wells within one mile radius of site. There are 4,000 people in one mile radius.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☒ NO	COMMENTS	☒ YES ☐ NO	COMMENTS: Gradient is towards the surface

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☒ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Not known at the time of assessment	☐	(mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 4,000 NO. OF PERSONS	B. 13,000 NO. OF PERSONS	C. 32,660 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: < 1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: 400

04 DISTANCE TO NEAREST OFF-SITE BUILDING: < 1/4 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

U.S. Census Tract Map shows that there are 32,660 people within 3 mile radius of site. The area in the vicinity of site is moderately populated.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: UT | 02 SITE NUMBER: D041075896

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one) No bedrock has been found at this time.

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
_____ (ft)	_____ (ft)	6-12	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
-43 (in)	1.5 (in)	3-6 %	West	3-6 %

09 FLOOD POTENTIAL: SITE IS IN 100 YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

1 (mi)

ENDANGERED SPECIES: Bald Eagle, Peregrin Falcon

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. On-site (mi)	B. 1/4 (mi)	C. _____ (mi)	D. 1/4 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

To the East of the site are Wasatch Mountains and city of Centerville. The Great Salt Lake is located West of the site The site slopes 3-6% towards west.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1. Utah Bureau of Solid & Hazardous Waste
2. Telephone contact with U.S. Department of Interior, Endangered Species Team (801) 524-4430)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
UT	D041075896

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE	
GROUNDWATER	7	James Montgomery Laboratories	Have been Analyzed	2/85
SURFACE WATER/sediments	6	Utah Health Dept. Lab	Have been Analyzed	8/85
WASTE				
AIR				
RUNOFF				
SPILL				
SOIL	5	James Montgomery Laboratories	Have been analyzed	5/84
VEGETATION				
OTHER				

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Surface Water contamination	Based upon visual observations it appears that the contaminants have migrated off-site. The Down stream Surface Water is reddish brown presumably due to the high concentration of iron and other heavy metals.

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND ☐ AERIAL

02 IN CUSTODY OF Attached with this report (copies)
(Name of organization or individual)

03 MAPS
X YES
☐ NO

04 LOCATION OF MAPS Attached with this report (copies)

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1. Data provided by Syro Steel to Utah Bureau of Solid and Hazardous Waste.
2. Utah Bureau of Solid and Hazardous Waste Files.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION
01 STATE: UT | 02 SITE NUMBER: D041075896

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Syro Steel Company-Western Div.	041075896	950 West 400 South	3444	Centerville	UT	84014

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
thru 1971 National Galvanizing Co.						

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1. Utah Bureau of Solid and Hazardous Waste files.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
UT	D041075896

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
UT	D041075896

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Syro Steel Co.-Western Div.	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
950 West 400 South	

05 CITY	06 STATE	07 ZIP CODE
Centerville	UT	84014

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
UT	D041075896

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
UT	D041075896

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S. CAPPING COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
UT	D041075896

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION X YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

1. U.S. Environmental Protection Agency issued a Notice of Violation and Compliance Order because Syro Steel violated their NPDES discharge limits.

2. Bureau of Water Pollution Control, State of Utah issued a warning letter because Syro Steel had a major spill and the spill was not reported to the appropriate authorities. The contaminants from the spill migrated off-site.

III. SOURCES OF INFORMATION *Cite specific references, e.g., state files, sample analysis, reports.*

1. Utah Bureau of Solid and Hazardous Waste files.

2. Utah Water Pollution Control.

SITE Syro Steel Company -

OBJECTIVE: Collect sediments and surface water samples to document surface water release.

SAMPLING:

A) Groundwater Route - Number of Samples None
Location of Samples Not applicable.

Rationale for Sampling

B) Surface Water Route - Number of Samples 6
Location of Samples As shown on the attached site map.

Rationale for Sampling Upgradient and Downgradient samples to confirm surface water release.

C) Air Route - Number of Samples None
Location of Samples Not applicable.

Rationale for Sampling

D) Soil/Sediment - Number of Samples 6
Location of Samples As shown on the attached site map. Same locations where surface water samples will be taken.

Rationale for Sampling

E) Waste - Number of Samples None
Location of Samples

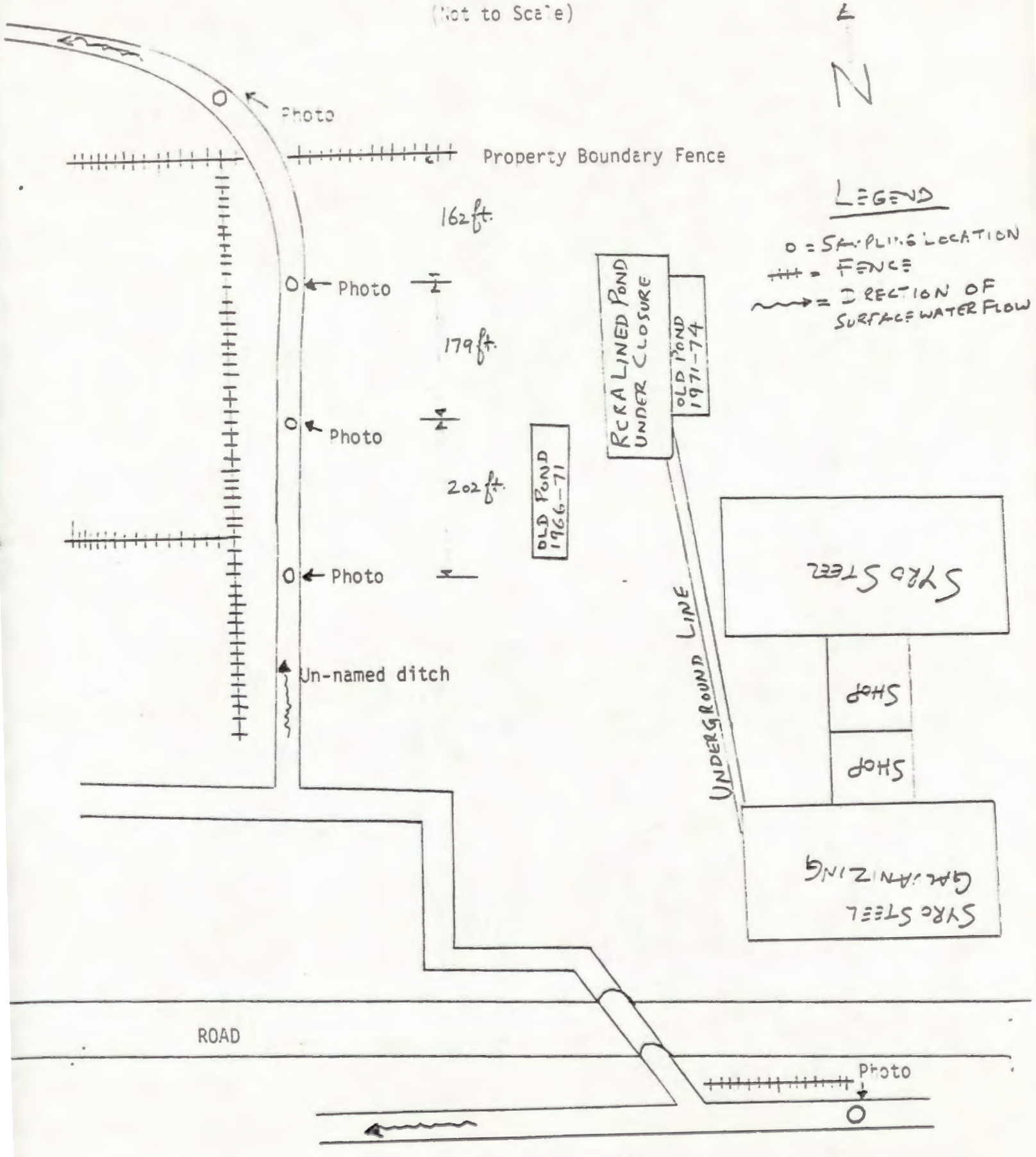
Rationale for Sampling Not applicable

F) Parameters Heavy Metal (Ba, Cd, Cr, Fe, Mn, Mo, Ni, Ag, Zn.).

G) Types of Sampling Equipment Sample Bottles, Trier, Stainless steel scoop, Ice chest and shenel.

SYRO STEEL CORPORATION

(Not to Scale)



SITE Syro Steel Company

PERSONNEL:

A) Number 3

B) Assignments Samplers - 2 (Joel Hebdon, James Salmon)
Record Keeping and Pictures - 1 (Muhammad Slam).

SAFETY:

A) Level of Protection - A___ B___ C___ D X
If Level C, what type of cartridge is to be used? _____
Rationale for the Level of Protection Only surface water will be sampled which has heavy metals contamination. No organics and the exposure risk is minimum.

B) Types of Protective Clothing and Equipment Coverall, Rubber Boots and Gloves.

C) Types of Surveillance Equipment None

D) Decon Procedures Soap, Water, Distilled Water.

E) Rationale Required for a Change in the Level of Protection:
Upgrade Site is well characterized - not applicable.

Downgrade Not applicable.

SAMPLING REPORT

Date of Inspection:	June 10, 1985
Facility:	Syro Steel Company 950 West 400 South Centerville, Utah 84014
Facility Contact:	Gerald Koonz
Participants:	Muhammad Slam, Utah Health Dept. James Salmon, Utah Health Dept. Joel Hebdon, Utah Health Dept.
Weather Conditions:	Sunny, 82°F 45% humidity and light wind from Southwest
Time In:	9:55 a.m.
Time Out:	12:30 p.m.
Report Prepared by:	Muhammad Slam

NARRATIVE:

The inspection team arrived at the site and met with Syro Steel representatives. The scope and purpose of sampling were explained.

The inspection team walked along the creek to locate background and other sampling locations. One upstream and three downstream locations were selected for sampling. The upstream and one downstream locations were "off-site" of Syro property. Attachment I contains sample description and attachment II indicates sample locations. Each location was sampled for surface water and surface sediments (soil).

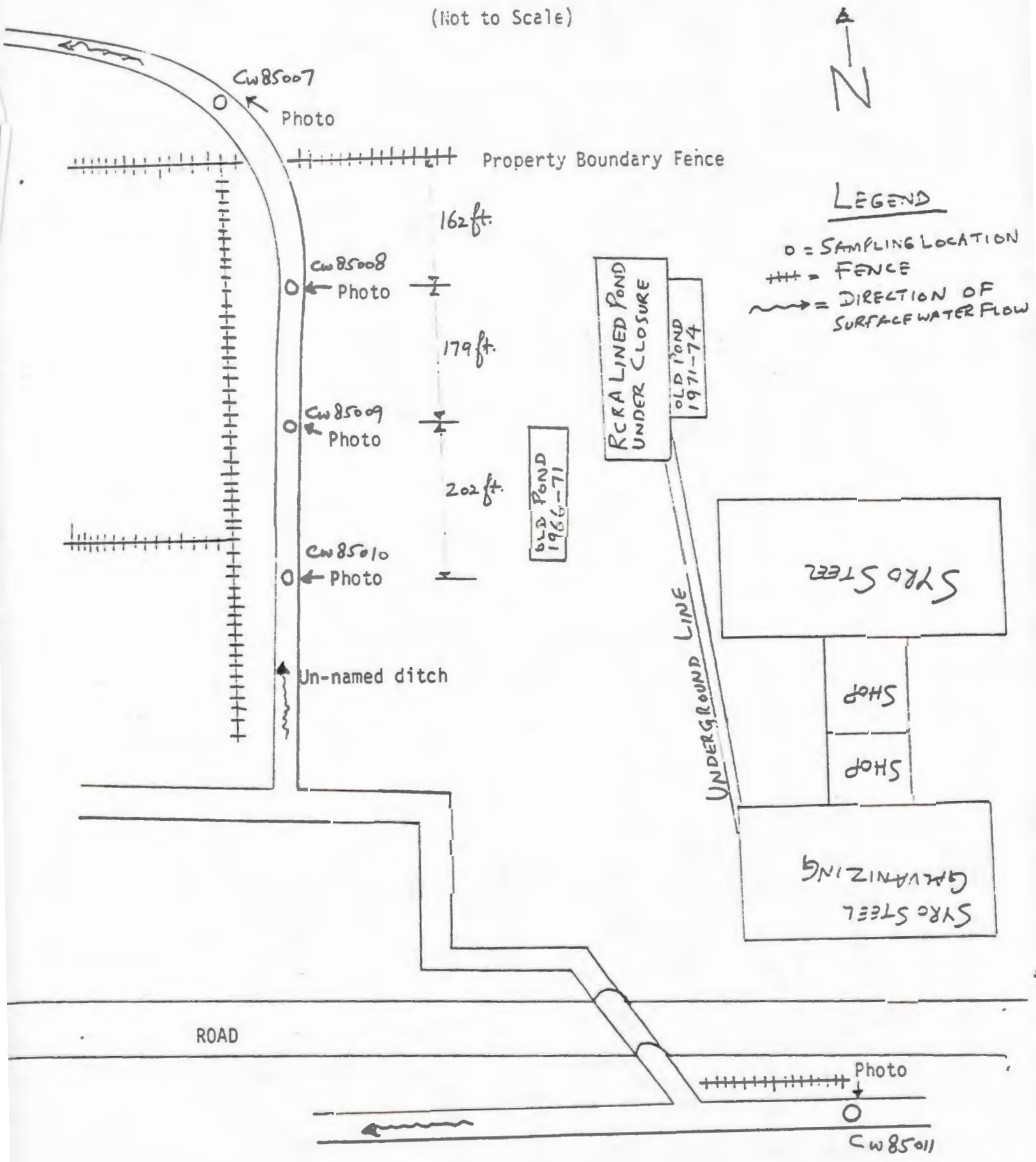
ATTACHMENT I

Sample No.	Time	Sample Location	Type	No. of Container
CW 85007	10:30	Off-site Downgradient surface sediments.	Grab	1
CW 85007A	10:30	Off-site Downgradient Surface Water	Grab	2
CW 85008	10:45	On-site Downgradient Surface Sediments 1	Grab	1
CW 85008A	10:45	On-site Downgradient Surface Water 1	Grab	2
CW 85009	11:01	On-site Downgradient Surface Sediments 2	Grab	1
CW 85009A	11:01	On-site Downgradient Surface Sediments 2	Grab	2
CW 85010	11:15	On-site Downgradient Surface Sediment 3	Grab	1
CW 85010A	11:15	On-site Downgradient Surface Water 3	Grab	2
CW 85011	11:35	Off-site Upgradient Surface Sediment	Grab	1
CW 85011A	11:35	Off-site Upgradient Surface Water	Grab	2
CW 85012	09:20	Blank	Grab	2

MS:ct
6847

SYRO STEEL CORPORATION

(Not to Scale)



SYRO STEEL - UPGRADIENT BACKGROUND SAMPLE CW&S011 LOOKING SOUTH
6/10/85 1135 MAS

SYRO STEEL - (UNNAMED) CREEK FLOWING FROM SYRO WITH SYRO IN THE BACKGROUND)
LOOKING EAST
6/10/85 1203 MAS

SYRO STEEL DOWNGRADIENT SAMPLE ON SITE 3 CW&S010
LOOKING WEST 6/10/85 1115 MAS

SYRO STEEL - UNNAMED CREEK DOWNSTREAM OF SYRO - LOOKING EAST
6/10/85 - 1205 MAS

SYRO STEEL - UNNAMED CREEK DOWNSTREAM OF SYRO WITH SYRO IN THE BACKGROUND - LOOKING EAST
6/10/85 1201 MAS

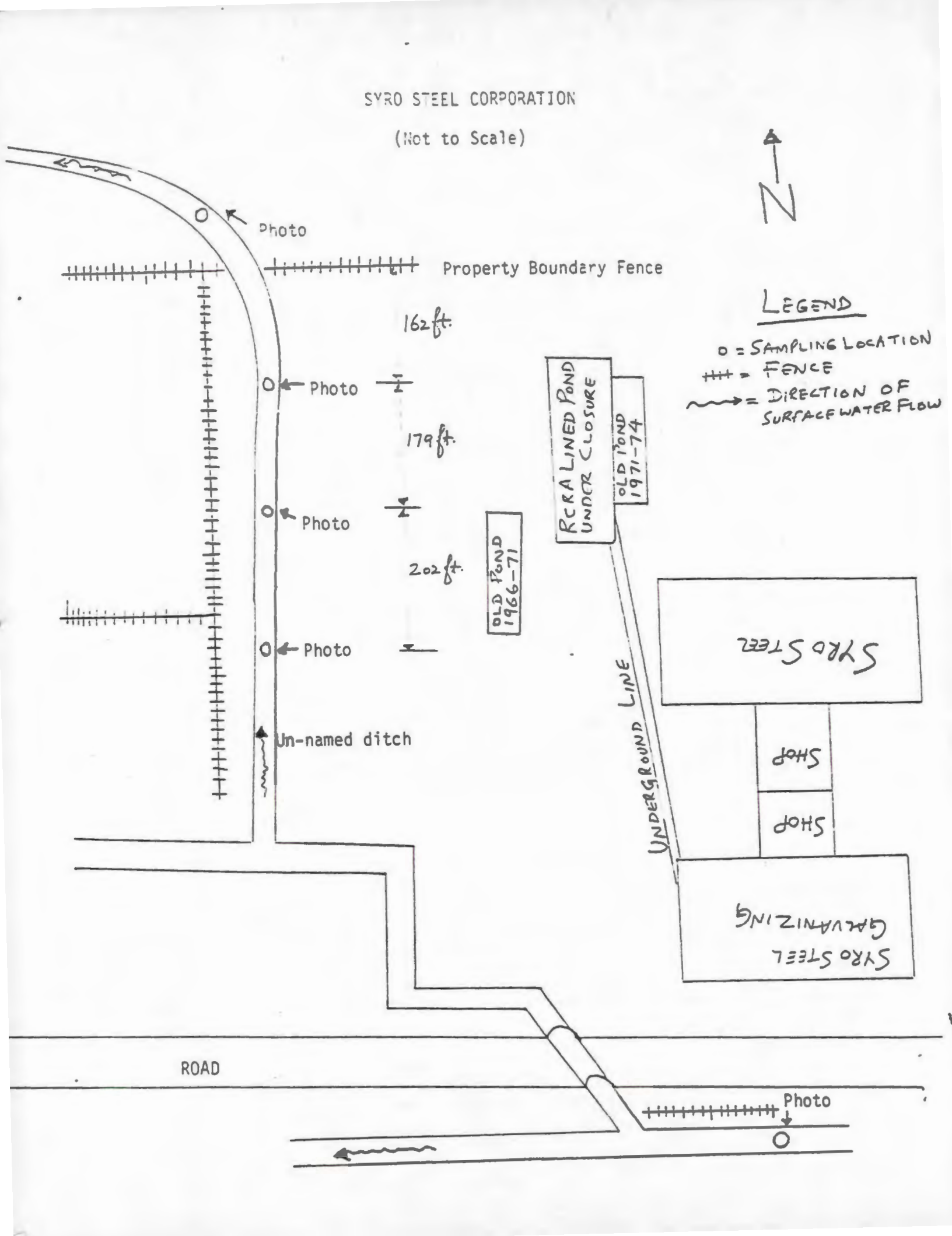
SYRO STEEL SURFACE WATER SAMPLE ANALYSIS
June 10, 1985

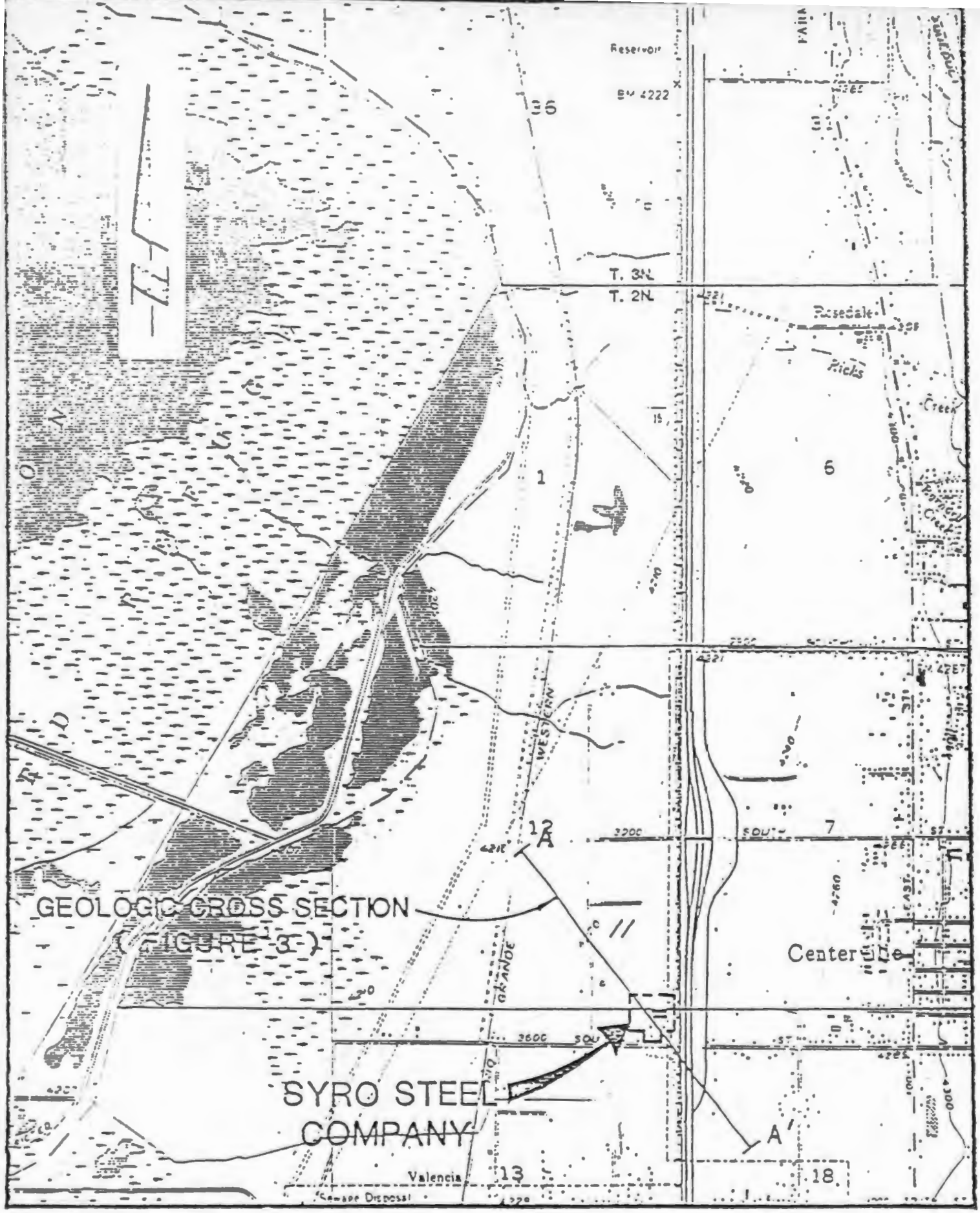
	Sediments 85007	Water 85007A	Sediments 85008	Water 85008A	Sediments 85009	Water 85009A	Sediments 85010	Water 85010A	Sediments 85011	Water 85011A	Blank 85012
arium	77.0		95.0		76.0		110.0		20.0		0.2
admium	0.55	0.02	2.0	0.02	7.5	0.02	0.4	0.02	0.1	0.02	0.02
hromium	36.0	0.2	68.0	0.2	86.0	0.2	60.0	0.33	64.0	0.2	0.2
ron	40,000	200	116,000	290.0	67,000.0	290.0	99,000.00	520.0	20,000	8.0	0.21
ead	27.0	0.24	67.0	0.2	76.0	0.2	77.0	0.22	15.0	0.2	0.2
anganese	260.0		250		210.0		310.0		630.0		0.1
olybdenum	5.0		6.0		5.5		8.3		6.2		0.4
ickel	23.0		34.0		32.0		26.0		22.0		0.1
ilver	0.78		1.3		1.0		1.3		1.0		0.02
inc	4700.0	34.0	890.0	37.6	8,200.0	53.0	5700.0	46.0	51.0	0.1	.053

All concentrations are expressed in mg/l.

SYRO STEEL CORPORATION

(Not to Scale)





USGS FARMINGTON
QUADRANGLE MAP
7.5' SERIES

LOCATION MAP

0 1000 2000 4000 FT.

CHAIN OF CUSTODY RECORD

PROJ. NO. 0610 | PROJECT NAME: SYRO STEEL Surface Stream

SAMPLERS: (Signature) JIM SALMON / JOEL HEBDON

NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Water Chemistry	Organic Residue	Radiochemistry	Microbiology	Total Metals	CN or Total Cr	REMARKS
A 07	850610	1030		X	OFFSITE DOWNGRADIENT	3	X				X	X	Lab # A 852536/852536 Sample + A # Sample has three Containers
A 08	850610	1145		X	ON SITE 1 DOWN GRADIENT	3	X				X	X	852537/852538
A 09	850610	1101		X	ON-SITE 2 DOWN GRADIENT	3	X				X	X	852539/852540
A 10	850610	1115		X	ON SITE 3 DOWN GRADIENT	3	X				X	X	852541/852542
A 11	850610	1135		X	OFF SITE UPGRADIENT	3	X				X	X	852543/852544
A 12	850610	0920		X	BLANK	2	X				X		852545

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	6/10/85 1353	Witness: MASLAM			Witness:
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
		Witness:			Witness:
Relinquished by: (Signature)	Date / Time	Received by:	Date / Time	Remarks	
		Witness:			

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) . -6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2535

Field No. CW 85007 [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 10:30 (24 hr. clock) County Davis

Sample collected by Hebdon, Slam Sample Type ~~Soil~~ Mud

Facility from which sample was collected Syro Steel

Exact description of sampling point Offsite downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[X] pH		
[ ] Solids		%
[X] I, SO_4^{-2}		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[X] Arsenic		PPM
[X] Barium	77.	PPM
[ ] Beryllium		PPM
[X] Cadmium	0.55	PPM
[X] Chromium	36.	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	40,000.	PPM
[X] Lead	27.	PPM
[X] Manganese	260.	PPM
[X] Mercury		PPM
[X] Molybdenum	<5.	PPM
[X] Nickel	23.	PPM
[X] Selenium		PPM
[X] Silver	0.78	PPM
[ ] Vanadium		PPM
[X] Zinc	4700.	PPM
[ ]		PPM

****

Results are: [X]Dry weight basis, [ ]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

Rev. 3/82
Field No. CW85007A

[1] TC [1] TM [ ] Nut [ ] Pest. [ ] Rad.
[ ] PC [ ] PM [ ] BOD [ ] Bact. [ ] Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 2536

Storet No. _____ (702)
Water Syst. No. _____ (703) Source No. _____ (704)
Water Rights No. _____ (707)

Date Collected: 85 06 10 (714) (yr. mo. dy.)
Time Collected: 1030 (410) (24-hour clock)

Exact Description of sampling Point: OFFSITE DOWNGRADIENT SYRO STEEL (646)

Supply Owned by: SYRO STEEL (712)
Sample Type: _____ (710)

Sample Collected by: J HEBRON M SLAM (713)

SEND REPORT TO: Phone _____
JIM SALMON BSHWM (715)
(648)
(717) zip code

Sample Source (719): 03
01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County (611): 06
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use: _____ (708)
Proposed use: _____ (709)
1. Culinary
2. Agriculture
3. Industrial
4. Other

Cost Code: 365 (770)

1 FIELD TESTS

Temperature (°C)	(792)	CO_2, mg/l	(572)
D.O., mg/l	(793)	Depth, m	(609)
Sp. Cond. µmhos	(653)	Cl Resid., mg/l	(753)
pH	(651)	Flow, MGD	(652)
Sp. Gravity	(608)	Flow, GPM	(604)
Transparency, m	(649)	Flow, cfs	(659)

2 WASTEWATER ANALYSIS

Temperature (°C) (650) pH (782) BACT. LAB. No. _____

	mg/l		mg/l		
B.O.D.$_5$	(794)	T.O.C.	(671)	M.P.N. Total Coliforms/100ml	(658)
Tot. Sus. Solids	(787)	C.O.D.	(777)	M.P.N. Fecal Coliforms/100ml	(657)
NO_2+NO_3,N	(602)	Cyanide	(775)	Fecal Strep C/100ml.	(656)
T.K.N.	(778)	Phenolics	(783)	M.F. Total Coliforms/100ml.	(654)
Oil & Grease	(780)	Sulfide	(672)	M.F. Fecal Coliforms/100ml.	(655)
				Plate Count-Org./ml.	(599)

3 CATIONS

Filtered / Unfiltered

me/l	CATIONS	mg/l	ug/l (ppb)	
	Ammonia as N			(722)
	Arsenic			(723)
	Barium			(724)
	Boron			(725)
	Cadmium			(727)
	Calcium			(728)
	Chromium			(729)
	Chromium, Hex. as Cr			(730)
	Copper			(732)
	Iron, dissolved			(733)
	Lead			(734)
	Magnesium			(737)
	Manganese			(738)
	Nickel			(740)
	Potassium			(742)
	Selenium			(743)
	Silver			(744)
	Sodium			(745)
	Zinc			(749)
	TOTAL CATIONS			

Sp. Cond. µmhos/cm. 665 (762)
TDS @ 180°C (786)

4 CHEMICAL ANALYSIS

pH, units 7.4

me/l	ANIONS	mg/l	
	Bicarbonate	204	(758)
	Carbon Dioxide	12	(759)
	Carbonate	0	(760)
	Chloride		(763)
33	CO_3 Solids	100	
	Fluoride	0.32	(765)
	Hydroxide	00	(767)
	Nitrate as N		(605)
	Nitrite as N		(606)
	Phosphorus, Ortho as P		(607)
	Silica, dissolved as SiO_2		(750)
	Sulfate		(772)
	TOTAL ANIONS		
	GRAND TOTAL		
	Tot. Phosphorus		(785)
	Total Alk. as $CaCO_3$	167	(752)
	T. Hdns. as $CaCO_3$		(754)
	Surfactant as MBAS		(773)
	Turbidity, as NTU	>10000	(757)
	Sp. Gravity		(608)

5 TOTAL METALS ANALYSIS

CATIONS	mg/l	ug/l (ppb)	
Aluminum			(800)
Arsenic			(660)
Barium			(661)
Beryllium			(801)
Cadmium			(662)
Chromium			(663)
Cobalt			(804)
Copper			(664)
Gold			(700)
Iron			(755)
Lead			(665)
Manganese			(666)
Mercury		< 1	(739)
Molybdenum			(802)
Nickel			(667)
Selenium			(668)
Silver			(669)
Uranium			(601)
Vanadium			(803)
Zinc			(670)

6 RADIOLOGICS

	pC/l-g		pC/l-g	
Alpha, gross		(621)	^{89}Sr	(633)
Beta, gross		(623)	^{131}I	(635)
Tritium, ^3H		(625)	^{134}Cs	(637)
^{226}Radium		(627)	^{137}Cs	(639)
^{228}Radium		(629)		
^{90}Sr		(631)		

Analyses Approved By: _____ Date: _____

INTERPRETATION OF ANALYSES:
Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform			
M.P.N. Fecal Coliform			

By _____
ENVIRONMENTAL HEALTH

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) [illegible]-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2536

Field No. CW 85007A [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 10:30 (24 hr. clock) County Davis

Sample collected by Hebdon, Slam Sample Type Water

Facility from which sample was collected Syro Steel

Exact description of sampling point Offsite downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[ ] pH		
[ ] Solids		%
[ ]		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

****

[ ] Aluminum		PPM
[ ] Arsenic		PPM
[ ] Barium		PPM
[ ] Beryllium		PPM
[X] Cadmium	<,02	PPM
[X] Chromium	<,2	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	200,	PPM
[X] Lead	0,24	PPM
[ ] Manganese		PPM
[ ] Mercury		PPM
[ ] Molybdenum		PPM
[ ] Nickel		PPM
[ ] Selenium		PPM
[ ] Silver		PPM
[ ] Vanadium		PPM
[X] Zinc	34.	PPM
[ ]		PPM

****

Results are: [ ]Dry weight basis, [X]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Med. ..l Dr. SLC, Utah 84113 (801) ..-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2537

Field No. CW 85008 [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 10:45 (24 hr. clock) County Davis

Sample collected by Salmon, Hebdon Sample Type Mud

Facility from which sample was collected Syro Steet

Exact description of sampling point ONSITE 1 Downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[X] pH		
[ ] Solids		%
[X] T. SO_4^{-2}		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] B Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The B above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[X] Arsenic		PPM
[X] Barium	95.	PPM
[ ] Beryllium		PPM
[X] Cadmium	2.0	PPM
[X] Chromium	68.	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	116,000.	PPM
[X] Lead	67.	PPM
[X] Manganese	250.	PPM
[X] Mercury		PPM
[X] Molybdenum	<6.	PPM
[X] Nickel	34.	PPM
[X] Selenium		PPM
[X] Silver	1.3	PPM
[ ] Vanadium		PPM
[X] Zinc	8900.	PPM
[ ]		PPM

****

Results are: [X]Dry weight basis, [ ]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

Rev. 3/82
Field No. CW85008A

[1] TC [ ] PC [1] TM [ ] PM [ ] Nut [ ] BOD [ ] Pest. [ ] Rad. [ ] Bact. [ ] Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Jul 1985 2538
Sample No. 701

Storet No. 702
Water Syst. No. Source No. 703 704
Date Collected 8 5 0 6 1 0 (yr. mo. dy.) 705
Time Collected 1045 (24-hour clock) 615
Water Rights No. 707
Exact Description of sampling Point: ONSITE IDOWNGRADIENT SYRO STEEL 646
Supply Owned by: SYRO STEEL 712
Sample Type 710
Sample Collected by 713
SEND REPORT TO: Phone 715 / 648 / 717
zip code

Sample Source 719: 03
01 Spring, 02 Well, 03 Stream, 04 Lake, 05 Dist. syst., 06 Effluent, 07 Storm sewer, 08 Other, 09 Tunnel, 10 Artesian well, 11 Swimming pool

County 611: 06
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use 708
Proposed use 709
1. Culinary
2. Agriculture
3. Industrial
4. Other
Cost Code 770

1 FIELD TESTS

Temperature (°C)	792	CO_2, mg/l	572
D.O., mg/l	793	Depth, m	609
Sp. Cond. µmhos	653	Cl Resid., mg/l	753
pH	651	Flow, MGD	652
Sp. Gravity	608	Flow, GPM	604
Transparency, m	649	Flow, cfs	659

2 WASTEWATER ANALYSIS

Temperature (°C) 650 | pH 782 | BACT. LAB. No.

	mg/l		mg/l		
B.O.D.$_5$	794	T.O.C.	671	M.P.N. Total Coliforms/100ml	658
Tot. Sus. Solids	787	C.O.D.	777	M.P.N. Fecal Coliforms/100ml	657
NO_2+NO_3.N	602	Cyanide	775	Fecal Strep C/100ml.	656
T.K.N.	778	Phenolics	783	M.F. Total Coliforms/100ml.	654
Oil & Grease	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 Filtered / Unfiltered

me/l	CATIONS	mg/l	ug/l (ppb)	
	Ammonia as N			722
	Arsenic			723
	Barium			724
	Boron			725
	Cadmium			727
	Calcium			728
	Chromium			729
	Chromium, Hex. as Cr			730
	Copper			732
	Iron, dissolved			733
	Lead			734
	Magnesium			737
	Manganese			738
	Nickel			740
	Potassium			742
	Selenium			743
	Silver			744
	Sodium			745
	Zinc			749
	TOTAL CATIONS			

Sp. Cond. µmhos/cm. 645 762
TDS @ 180°C 786

4 CHEMICAL ANALYSIS

pH, units 7.3

me/l	ANIONS	mg/l	
	Bicarbonate	189	758
	Carbon Dioxide	15	759
	Carbonate	0	760
	Chloride		763
309	CO_3 Solids	92	
	Fluoride	0.4	765
	Hydroxide	00	767
	Nitrate as N		605
	Nitrite as N		606
	Phosphorus, Ortho as P		607
	Silica, dissolved as SiO_2		750
	Sulfate		772
	TOTAL ANIONS		
	GRAND TOTAL		

Tot. Phosphorus		785
Total Alk. as $CaCO_3$	154	752
T. Hdns. as $CaCO_3$		754
Surfactant as MBAS		773
Turbidity, as NTU	>10000	757
Sp. Gravity		608

TOTAL METALS ANALYSIS

5 CATIONS

CATIONS	mg/l	ug/l (ppb)	
Aluminum			800
Arsenic			660
Barium			661
Beryllium			801
Cadmium			662
Chromium			663
Cobalt			804
Copper			664
Gold			700
Iron			755
Lead			665
Manganese			666
Mercury		<1	739
Molybdenum			802
Nickel			667
Selenium			668
Silver			669
Uranium			601
Vanadium			803
Zinc			670

6 RADIOLOGICS

	pC/l-g		pC/l-g	
Alpha, gross		621	^{89}Sr	633
Beta, gross		623	^{131}I	635
Tritium, ^3H		625	^{134}Cs	637
^{226}Radium		627	^{137}Cs	639
^{228}Radium		629		
^{90}Sr		631		

Analyses Approved By: Date:

INTERPRETATION OF ANALYSES:
Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform.			
M.P.N. Fecal Coliform.			

By _____
ENVIRONMENTAL HEALTH

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) . -6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 852538

Field No. CW85008A [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 10:45 (24 hr. clock) County Davis

Sample collected by (no entry) Sample Type Water

Facility from which sample was collected Syro Steel

Exact description of sampling point Onsite 1 downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[ ] pH		
[ ] Solids		%
[ ]		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[ ] Arsenic		PPM
[ ] Barium		PPM
[ ] Beryllium		PPM
[X] Cadmium	<,02	PPM
[X] Chromium	<,2	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	290.	PPM
[X] Lead	<,2	PPM
[ ] Manganese		PPM
[ ] Mercury		PPM
[ ] Molybdenum		PPM
[ ] Nickel		PPM
[ ] Selenium		PPM
[ ] Silver		PPM
[ ] Vanadium		PPM
[X] Zinc	37.6	PPM
[ ]		PPM

****

Results are: [ ]Dry weight basis, [X]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Mel al Dr. SLC, Utah 84113 (801) .3-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2539

Field No. CU85009 [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 11:01 (24 hr. clock) County Davis

Sample collected by Salmon, Hebdon Sample Type Mud

Facility from which sample was collected Syro Steel

Exact description of sampling point Onsite 2 downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[X] pH		
[ ] Solids		%
[X] T, SO_4^{-2}		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[X] Arsenic		PPM
[X] Barium	76.	PPM
[ ] Beryllium		PPM
[X] Cadmium	7.5	PPM
[X] Chromium	86.	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	67,000.	PPM
[X] Lead	76.	PPM
[X] Manganese	210.	PPM
[X] Mercury		PPM
[X] Molybdenum	5.5	PPM
[X] Nickel	32.	PPM
[X] Selenium		PPM
[X] Silver	1.0	PPM
[ ] Vanadium		PPM
[X] Zinc	8,200.	PPM
[ ]		PPM

****

Results are: [X]Dry weight basis, [ ]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

Rev. 3/82
Field No. CW850094

TC / PC — TM / PM — Nut / BOD — Pest. / Rad. / Bact. / Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. [illegible] 2540

Storet No. _____ (702)
Water Syst. No. Source No. _____ (703) (704)
Date Collected 85 06 10 (714) (yr. mo. dy.)
Time Collected 1101 (810) (24-hour clock)
Water Rights No. _____ (707)
Exact Description of sampling Point: ONSITE DOWNGRADIENT SYRO STEEL (646)
Supply Owned by: SYRO STEEL (712)
Sample Type _____ (710)
Sample Collected by _____ (713)
SEND REPORT TO: _____ Phone _____ (715) (648) (717)
zip code

Sample Source (719): 02
01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County (611): 06
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use _____ (708)
Proposed use _____ (709)
1. Culinary
2. Agriculture
3. Industrial
4. Other
Cost Code _____ (770)

1 FIELD TESTS

Temperature (°C)	(792)	CO_2, mg/l	(572)
D.O., mg/l	(793)	Depth, m	(609)
Sp. Cond. µmhos	(653)	Cl Resid., mg/l	(753)
pH	(651)	Flow, MGD	(652)
Sp. Gravity	(608)	Flow, GPM	(604)
Transparency, m	(649)	Flow, cfs	(659)

2 WASTEWATER ANALYSIS

Temperature (°C) _____ (650) pH _____ (782) BACT. LAB. No. _____

	mg/l		mg/l		
B.O.D.$_5$	(794)	T.O.C.	(671)	M.P.N. Total Coliforms/100ml	(656)
Tot. Sus. Solids	(787)	C.O.D.	(777)	M.P.N. Fecal Coliforms/100ml	(657)
NO_2+NO_3,N	(602)	Cyanide	(775)	Fecal Strep C/100ml.	(656)
T.K.N.	(778)	Phenolics	(783)	M.F. Total Coliforms/100ml.	(654)
Oil & Grease	(780)	Sulfide	(672)	M.F. Fecal Coliforms/100ml.	(655)
				Plate Count-Org./ml.	(599)

3 Filtered / Unfiltered — CATIONS

	me/l	mg/l	ug/l (ppb)	
Ammonia as N				(722)
Arsenic				(723)
Barium				(724)
Boron				(725)
Cadmium				(727)
Calcium				(728)
Chromium				(729)
Chromium, Hex. as Cr				(730)
Copper				(732)
Iron, dissolved				(733)
Lead				(734)
Magnesium				(737)
Manganese				(738)
Nickel				(740)
Potassium				(742)
Selenium				(743)
Silver				(744)
Sodium				(745)
Zinc				(749)
TOTAL CATIONS				

Sp. Cond. µmhos/cm. 700 (762)
TDS @ 180°C _____ (786)

4 CHEMICAL ANALYSIS — ANIONS

pH, units 7.1

	me/l	mg/l	
Bicarbonate		158	(758)
Carbon Dioxide		20	(759)
Carbonate		0	(760)
Chloride			(763)
CO_3 Solids	2.59	77	
Fluoride		0.34	(765)
Hydroxide		00	(767)
Nitrate as N			(605)
Nitrite as N			(606)
Phosphorus, Ortho as P			(607)
Silica, dissolved as SiO_2			(750)
Sulfate			(772)
TOTAL ANIONS			
GRAND TOTAL			
Tot. Phosphorus			(785)
Total Alk. as $CaCO_3$		129	(752)
T. Hdns. as $CaCO_3$			(754)
Surfactant as MBAS			(773)
Turbidity, as NTU		>1000.0	(757)
Sp. Gravity			(608)

TOTAL METALS ANALYSIS

5 CATIONS — mg/l — ug/l (ppb)

Aluminum		(800)
Arsenic		(660)
Barium		(661)
Beryllium		(801)
Cadmium		(662)
Chromium		(663)
Cobalt		(804)
Copper		(664)
Gold		(700)
Iron		(755)
Lead		(665)
Manganese		(666)
Mercury		<1 (739)
Molybdenum		(802)
Nickel		(667)
Selenium		(668)
Silver		(669)
Uranium,		(601)
Vanadium		(803)
Zinc		(670)

6 RADIOLOGICS

	pC/l-g		pC/l-g	
Alpha, gross		(621)	^{89}Sr	(633)
Beta, gross		(623)	^{131}I	(635)
Tritium, ^3H		(625)	^{134}Cs	(637)
^{226}Radium		(627)	^{137}Cs	(639)
^{228}Radium		(629)		
^{90}Sr		(631)		

Analyses Approved By: _____ Date: _____

INTERPRETATION OF ANALYSES:

Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform.			
M.P.N. Fecal Coliform.			

By _____
ENVIRONMENTAL HEALTH

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) 533-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2540

Field No. CW85009A [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 11:01 (24 hr. clock) County Davis

Sample collected by (No Entry) Sample Type Water

Facility from which sample was collected Syro Steel

Exact description of sampling point Onsite 2, downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[ ] pH		
[ ] Solids		%
[ ]		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[ ] or only those Metals checked below

[ ] Aluminum		PPM
[ ] Arsenic		PPM
[ ] Barium		PPM
[ ] Beryllium		PPM
[X] Cadmium	<.02	PPM
[X] Chromium	<.2	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	290.	PPM
[X] Lead	<.2	PPM
[ ] Manganese		PPM
[ ] Mercury		PPM
[ ] Molybdenum		PPM
[ ] Nickel		PPM
[ ] Selenium		PPM
[ ] Silver		PPM
[ ] Vanadium		PPM
[X] Zinc	53.	PPM
[ ]		PPM

****

Results are: [ ]Dry weight basis, [X]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) . 5-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2541

Field No. CW85010 [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 11:15 (24 hr. clock) County Davis

Sample collected by Salmon, Hebdon Sample Type Mud

Facility from which sample was collected Syro Steel

Exact description of sampling point onsite 3 downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[X] pH		
[ ] Solids		%
[X] T, SO_4^{-2}		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[X] Arsenic		PPM
[X] Barium	110.	PPM
[ ] Beryllium		PPM
[X] Cadmium	<.4	PPM
[X] Chromium	60.	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	99,000.	PPM
[X] Lead	77.	PPM
[X] Manganese	310.	PPM
[X] Mercury		PPM
[X] Molybdenum	8.3	PPM
[X] Nickel	26.	PPM
[X] Selenium		PPM
[X] Silver	1.3	PPM
[ ] Vanadium		PPM
[X] Zinc	5700.	PPM
[ ]		PPM

****

Results are: [X]Dry weight basis, [ ]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

Rev. 3/82
Field No. CW 85010A

TC / PC / TM / PM / Nut / BOD / Pest. / Rad. / Bact. / Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. : 2542 701

Storet No. 702 | Water Syst. No. Source No. 703 704

Date Collected 8 5 0 6 1 0 714 (yr. mo. dy.) | Time Collected 1 1 1 5 810 (24-hour clock) | Water Rights No. 707

Exact Description of sampling Point
ONSITE DOWNGRADIENT SYRO STEEL 646

Supply Owned by: SYRO STEEL 712 | Sample Type 710

Sample Collected by 713

SEND REPORT TO: Phone 715 / 648 / 717 zip code

Sample Source 719
01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County 611
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use 708
Proposed use 709
1. Culinary
2. Agriculture
3. Industrial
4. Other

Cost Code 770

1 FIELD TESTS

Temperature (°C)	792	CO_2, mg/l	572
D.O., mg/l	793	Depth, m	609
Sp. Cond. µmhos	653	Cl Resid., mg/l	753
pH	651	Flow, MGD	652
Sp. Gravity	608	Flow, GPM	604
Transparency, m	649	Flow, cfs	659

2 WASTEWATER ANALYSIS

Temperature(°C) 650 | pH 782 | BACT. LAB. No.

	mg/l		mg/l		
B.O.D.$_5$	794	T.O.C.	671	M.P.N. Total Coliforms/100ml	658
Tot. Sus. Solids	787	C.O.D.	777	M.P.N. Fecal Coliforms/100ml	657
NO_2+NO_3.N	602	Cyanide	775	Fecal Strep C/100ml.	656
T.K.N.	778	Phenolics	783	M.F. Total Coliforms/100ml.	654
Oil & Grease	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 Filtered / Unfiltered

4 CHEMICAL ANALYSIS

pH, units 7.3

me/l	CATIONS	mg/l	ug/l(ppb)	me/l	ANIONS	mg/l
	Ammonia as N		722		Bicarbonate	184 758
	Arsenic		723		Carbon Dioxide	14 759
	Barium		724		Carbonate	0 760
	Boron		725		Chloride	763
	Cadmium		727	3.01	CO_3 Solids	90
	Calcium		728		Fluoride	0.41 765
	Chromium		729		Hydroxide	00 767
	Chromium, Hex. as Cr		730		Nitrate as N	605
	Copper		732		Nitrite as N	606
	Iron, dissolved		733		Phosphorus, Ortho as P	607
	Lead		734		Silica, dissolved as SiO_2	750
	Magnesium		737		Sulfate	772
	Manganese		738			
	Nickel		740			
	Potassium		742		TOTAL ANIONS	
	Selenium		743		GRAND TOTAL	
	Silver		744			
	Sodium		745		Tot. Phosphorus	785
	Zinc		749		Total Alk. as $CaCO_3$	150 752
	TOTAL CATIONS				T. Hdns. as $CaCO_3$	754
					Surfactant as MBAS	773
	Sp. Cond. µmhos/cm.	600	762		Turbidity, as NTU	>1000.0 757
	TDS @ 180°C		786		Sp. Gravity	608

TOTAL METALS ANALYSIS

5 CATIONS | mg/l | ug/l(ppb)

Aluminum		800
Arsenic		660
Barium		661
Beryllium		801
Cadmium		662
Chromium		663
Cobalt		804
Copper		664
Gold		700
Iron		755
Lead		665
Manganese		666
Mercury	<1	739
Molybdenum		802
Nickel		667
Selenium		668
Silver		669
Uranium		601
Vanadium		803
Zinc		670

6 RADIOLOGICS

	pC/l-g		pC/l-g	
Alpha, gross		621	^{89}Sr	633
Beta, gross		623	^{131}I	635
Tritium, ^3H		625	^{134}Cs	637
^{226}Radium		627	^{137}Cs	639
^{228}Radium		629		
^{90}Sr		631		

Analyses Approved By: _____ Date: _____

INTERPRETATION OF ANALYSES:
Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform.			
M.P.N. Fecal Coliform.			

By _____
ENVIRONMENTAL HEALTH

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) 53-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2542

Field No. CW85010A [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 11:15 (24 hr. clock) County Davis

Sample collected by (NO ENTRY) Sample Type Water

Facility from which sample was collected Syro Steel

Exact description of sampling point Onsite 3 downgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[ ] pH		
[ ] Solids		%
[ ]		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[ ] Arsenic		PPM
[ ] Barium		PPM
[ ] Beryllium		PPM
[X] Cadmium	<,02	PPM
[X] Chromium	0,33	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	520.	PPM
[X] Lead	0,22	PPM
[ ] Manganese		PPM
[ ] Mercury		PPM
[ ] Molybdenum		PPM
[ ] Nickel		PPM
[ ] Selenium		PPM
[ ] Silver		PPM
[ ] Vanadium		PPM
[X] Zinc	46,	PPM
[ ]		PPM

****

Results are: [ ]Dry weight basis, [X]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) [illegible]-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2543

Field No. CW 85011 [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 11:35 (24 hr. clock) County Davis

Sample collected by Salmon, Hebdon Sample Type Mud

Facility from which sample was collected Syro Steel

Exact description of sampling point Offsite upgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[X] pH		
[ ] Solids		%
[X] T, SO_4^{-2}		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[X] Arsenic		PPM
[X] Barium	<20.	PPM
[ ] Beryllium		PPM
[X] Cadmium	<.1	PPM
[X] Chromium	64.	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	20,000.	PPM
[X] Lead	15.	PPM
[X] Manganese	630.	PPM
[X] Mercury		PPM
[X] Molybdenum	6.2	PPM
[X] Nickel	22.	PPM
[X] Selenium		PPM
[X] Silver	1.0	PPM
[ ] Vanadium		PPM
[X] Zinc	51.	PPM
[ ]		PPM

****

Results are: [X]Dry weight basis, [ ]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

Rev. 3/82
Field No. CW8500 11A

[1] TC [1] TM [ ] Nut [ ] Pest. [ ] Rad.
[ ] PC [ ] PM [ ] BOD [ ] Bact. [ ] Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 2541

Storet No. [ ] 702
Water Syst. No. Source No. [ ] 703 [ ] 704
Date Collected 8 10 6 10 705 (yr. mo. dy.)
Time Collected 1135 706 (24-hour clock)
Water Rights No. [ ] 707
Exact Description of sampling Point: OFFSITE UPGRADIENT SYRO STEEL 646

Supply Owned by: SYRO STEEL 712
Sample Type [ ] 710
Sample Collected by [ ] 713
SEND REPORT TO: Phone [ ] 715 [ ] 648 [ ] 717 (zip code)

Sample Source [ ] 719
01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County [ ] 611
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use [ ] 708
Proposed use [ ] 709
1. Culinary
2. Agriculture
3. Industrial
4. Other
Cost Code [ ] 770

1 FIELD TESTS

Temperature (°C)	792	CO_2, mg/l	572
D.O., mg/l	793	Depth, m	609
Sp. Cond. µmhos	653	Cl Resid., mg/l	753
pH	651	Flow, MGD	652
Sp. Gravity	608	Flow, GPM	604
Transparency, m	649	Flow, cfs	659

2 WASTEWATER ANALYSIS

Temperature(°C) [ ] 650 pH [ ] 782 BACT. LAB. No. [ ]

	mg/l		mg/l		
B.O.D.$_5$	794	T.O.C.	671	M.P.N. Total Coliforms/100ml	658
Tot. Sus. Solids	787	C.O.D.	777	M.P.N. Fecal Coliforms/100ml	657
NO_2+NO_3,N	602	Cyanide	775	Fecal Strep C/100ml.	656
T.K.N.	778	Phenolics	783	M.F. Total Coliforms/100ml.	654
Oil & Grease	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 [ ] Filtered [ ] Unfiltered

me/l	CATIONS	mg/l	ug/l (ppb)	
	Ammonia as N			722
	Arsenic			723
	Barium			724
	Boron			725
	Cadmium			727
	Calcium			728
	Chromium			729
	Chromium, Hex. as Cr			730
	Copper			732
	Iron, dissolved			733
	Lead			734
	Magnesium			737
	Manganese			738
	Nickel			740
	Potassium			742
	Selenium			743
	Silver			744
	Sodium			745
	Zinc			749

TOTAL CATIONS _____ _____

[ ] Sp. Cond. µmhos/cm. 475 762
[ ] TDS @ 180°C [ ] 786

4 CHEMICAL ANALYSIS — pH, units 8.3

me/l	ANIONS	mg/l	
	Bicarbonate	208	758
	Carbon Dioxide	1	759
	Carbonate	0	760
	Chloride		763
3.4	CO_3 Solids	102	
	Fluoride	02	765
	Hydroxide	00	767
	Nitrate as N		605
	Nitrite as N		606
	Phosphorus, Ortho as P		607
	Silica, dissolved as SiO_2		750
	Sulfate		772

TOTAL ANIONS _____
GRAND TOTAL _____

Tot. Phosphorus		785
Total Alk. as $CaCO_3$	170	752
T. Hdns. as $CaCO_3$		754
Surfactant as MBAS		773
Turbidity, as NTU	520	757
Sp. Gravity		608

TOTAL METALS ANALYSIS

5	CATIONS	mg/l	ug/l (ppb)	
	Aluminum			800
	Arsenic			660
	Barium			661
	Beryllium			801
	Cadmium			662
	Chromium			663
	Cobalt			804
	Copper			664
	Gold			700
	Iron			755
	Lead			665
	Manganese			666
	Mercury		< 1	739
	Molybdenum			802
	Nickel			667
	Selenium			668
	Silver			669
	Uranium			601
	Vanadium			803
	Zinc			670

6 RADIOLOGICS

	pc/l-g		pc/l-g	
Alpha, gross		621	^{89}Sr	633
Beta, gross		623	^{131}I	635
Tritium, ^3H		625	^{134}Cs	637
^{226}Radium		627	^{137}Cs	639
^{228}Radium		629		
^{90}Sr		631		

Analyses Approved By: _____ Date: _____

INTERPRETATION OF ANALYSES:
Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform.			
M.P.N. Fecal Coliform.			

By _____
ENVIRONMENTAL HEALTH

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Medical Dr. SLC, Utah 84113 (801) 328-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2544

Field No. CW 85 011 A [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 10 (year/month/day) Time Collected 11:35 (24 hr. clock) County Davis

Sample collected by (NO ENTRY) Sample Type Water

Facility from which sample was collected Syro Steel

Exact description of sampling point Offsite upgradient

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[ ] pH		
[ ] Solids		%
[ ]		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[X] or only those Metals checked below

[ ] Aluminum		PPM
[ ] Arsenic		PPM
[ ] Barium		PPM
[ ] Beryllium		PPM
[X] Cadmium	<,02	PPM
[X] Chromium	<,2	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	8.0	PPM
[X] Lead	<,2	PPM
[ ] Manganese		PPM
[ ] Mercury		PPM
[ ] Molybdenum		PPM
[ ] Nickel		PPM
[ ] Selenium		PPM
[ ] Silver		PPM
[ ] Vanadium		PPM
[X] Zinc	0,10	PPM
[ ]		PPM

****

Results are: [ ]Dry weight basis, [X]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

HW-5 6/85

UTAH STATE HEALTH LABORATORY
44 Med. ..l Dr. SLC, Utah 84113 (801) 3-6131

ENVIRONMENTAL CHEMISTRY TOTAL METALS AND OTHER ANALYSES LAB NUMBER 85-2545

Field No. CW 85 012 [ ]Known Hazardous Waste [ ]Unknown Material

Date Collected 85 06 11 (year/month/day) Time Collected 09:20 (24 hr. clock) County Davis

Sample collected by Salmon, Hebdon Sample Type Blank

Facility from which sample was collected Syro Steel

Exact description of sampling point Blank

Field tests

Send report to Jim Salmon Bureau of Hazardous Waste Telephone No. 533-4145

Address 4231 State Office Bldg. S.L.C., Utah Zip Code 84114

Date and time received by Lab. Received by

****

OTHER ANALYSES

[ ] Oil and Grease		PPM
[ ] T.K.N.		PPM
[ ] Reactive HCN		PPM
[ ] Reactive H_2S		PPM
[X] pH		
[ ] Solids		%
[X] T, SO_4^{-2}		
[ ]		
[ ]		
[ ]		
[ ]		

TOTAL METALS
check one of the following

[ ] 8 Metals (As,Ba,Cd,Cr,Pb,Hg,Se,Ag)
[ ] or 12 Metals (The 8 above + Cu,Fe,Mn,Zn)
[ ] or all 18 Metals listed below
[ ] or only those Metals checked below

[ ] Aluminum		PPM
[X] Arsenic		PPM
[X] Barium	<.2	PPM
[ ] Beryllium		PPM
[X] Cadmium	<.02	PPM
[X] Chromium	<.2	PPM
[ ] Cobalt		PPM
[ ] Copper		PPM
[X] Iron	0.21	PPM
[X] Lead	<.2	PPM
[X] Manganese	<.1	PPM
[X] Mercury		PPM
[X] Molybdenum	<.4	PPM
[X] Nickel	<.1	PPM
[X] Selenium		PPM
[X] Silver	<.02	PPM
[ ] Vanadium		PPM
[X] Zinc	0.053	PPM
[ ]		PPM

****

Results are: [ ]Dry weight basis, [X]Wet weight basis

Preparation and analyses performed by

Analysis Certified By Date

Rev. 3/82 Field No. CW85012

1 [X] TC [ ] PC [X] TM [ ] PM [ ] Nut [ ] BOD [ ] Pest. [ ] Rad. [ ] Bact. [ ] Spec.

Date Recd.: _____ Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. : 2545 701

Storet No. 702 | Water Syst. No. | Source No. 703 704

Date Collected 705: 8 5 06 11 (yr. mo. dy.) | Time Collected 706: 0 9 2 0 (24-hour clock) | Water Rights No. 707

Exact Description of sampling Point 646:
SYRO STEEL
BLANK

Supply Owned by 712: SYKE STEEL Co. | Sample Type 710

Sample Collected by 713: J. SALMON / J. HERBON

SEND REPORT TO: Phone 533-4145
715: J. SALMON
648: DIR. OF HAZ. WASTE
717: zip code

Sample Source 719: 01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County 611: 01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use 708: 1. Culinary, 2. Agriculture, 3. Industrial, 4. Other
Proposed use 709:
Cost Code 770

1 FIELD TESTS

Temperature (°C) 792		CO_2, mg/l 572	
D.O., mg/l 793		Depth, m 609	
Sp. Cond. µmhos 653		Cl Resid., mg/l 753	
pH 651		Flow, MGD 652	
Sp. Gravity 608		Flow, GPM 604	
Transparency, m 649		Flow, cfs 659	

2 WASTEWATER ANALYSIS

Temperature(°C) 650 | pH 782 | BACT. LAB. No.

	mg/l		mg/l		
B.O.D.$_5$	794	T.O.C.	671	M.P.N. Total Coliforms/100ml	658
Tot. Sus. Solids	787	C.O.D.	777	M.P.N. Fecal Coliforms/100ml	657
NO_2+NO_3,N	602	Cyanide	775	Fecal Strep C/100ml.	656
T.K.N.	778	Phenolics	783	M.F. Total Coliforms/100ml.	654
Oil & Grease	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 Filtered / Unfiltered

4 CHEMICAL ANALYSIS

pH. units 6.6

me/l	CATIONS	mg/l	ug/l(ppb)	
	Ammonia as N			722
	Arsenic			723
	Barium			724
	Boron			725
	Cadmium			727
	Calcium			728
	Chromium			729
	Chromium, Hex. as Cr			730
	Copper			732
	Iron, dissolved			733
	Lead			734
	Magnesium			737
	Manganese			738
	Nickel			740
	Potassium			742
	Selenium			743
	Silver			744
	Sodium			745
	Zinc			749
	TOTAL CATIONS			

me/l	ANIONS	mg/l	
	Bicarbonate	2	758
	Carbon Dioxide	3	759
	Carbonate	0	760
	Chloride		763
.03	CO_3 Solids	0	
	Fluoride	0.15	765
	Hydroxide	00	767
	Nitrate as N		605
	Nitrite as N		606
	Phosphorus, Ortho as P		607
	Silica, dissolved as SiO_2		750
X	Sulfate TOTAL		772
	TOTAL ANIONS		
	GRAND TOTAL		

	Tot. Phosphorus		785
	Total Alk. as $CaCO_3$	1	752
	T. Hons. as $CaCO_3$		754
	Surfactant as MBAS		773
	Turbidity, as NTU	0.1	757
	Sp. Gravity		608

	Sp. Cond. µmhos/cm.	3	762
	TDS @ 180°C		786

TOTAL METALS ANALYSIS

5	CATIONS	mg/l	ug/l(ppb)	
	Aluminum			800
X	Arsenic			660
X	Barium			661
	Beryllium			801
X	Cadmium			662
X	Chromium			663
	Cobalt			804
	Copper			664
	Gold			700
X	Iron			755
X	Lead			665
X	Manganese			666
X	Mercury		<1	739
X	Molybdenum			802
X	Nickel			667
X	Selenium			668
X	Silver			669
	Uranium			601
	Vanadium			803
X	Zinc			670

6 RADIOLOGICS

		pC/l-g			pC/l-g	
	Alpha, gross		621	^{89}Sr		633
	Beta, gross		623	^{131}I		635
	Tritium, ^3H		625	^{134}Cs		637
	^{226}Radium		627	^{137}Cs		639
	^{228}Radium		629			
	^{90}Sr		631			

Analyses Approved By: _____ Date: _____

INTERPRETATION OF ANALYSES:

Remarks:

Based on State Standards, this sample was:

	Satisfactory	Questionable	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform			
M.P.N. Fecal Coliform			

By _____
ENVIRONMENTAL HEALTH

November 5, 1985
9:15 a.m.

TELEPHONE CALL:

TO: Randy Randall
Centerville City Public Water Supplies
Centerville, Utah
801-295-3477

I talked to Mr. Randall regarding the public water supply system in Centerville. Mr. Randall stated the following:

I. The City of Centerville derives its drinking water from the following sources:

A. Four groundwater wells in Centerville:

1. Well at 210 East 200 South

2. Well at 50 East Center Street

3. Holbrook Well

4. Rolling Hills Well.

B. Weber Basin Water Conservancy District (WBCD) which receives its water from four wells and two surface water sources.

II. The water from above two sources is mixed and serves population of 10,000 people.

III. The City of Centerville draws 1000 acre feet of drinking water from its four wells annually. This source serves about 6,500 people in Centerville.

IV. The City of Centerville has water rights to receive 500 acre feet of drinking water from WBCD annually. This source serves about 3,500 people in Centerville.

V. The four drinking water supply wells in Centerville are located within a one-mile radius of Syro Steel.

Muhammad A. Slam

Muhammad A. Slam
Environmental Engineer
Bureau of Solid & Hazardous Waste
Salt Lake City, UT 84145
(801)533-4145

MAS/pw

7603U/29

Scott M. Matheson
Governor

STATE OF UTAH
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P O Box 2500, Salt Lake City, Utah 84110-2500

Alvin E. Rickers Director
Room 474 801-533-6121

James O. Mason, M.D., Dr P.H.
Executive Director
801-533-6111

DIVISIONS
Community Health Services
Environmental Health
Family Health Services
Health Care Financing

OFFICES
Administrative Services
Community Health Nursing
Management Planning
Medical Examiner
State Health Laboratory

May 4, 1982
533-6146

RECEIVED
MAY 6 1982
Utah State Div. Of
Environmental Health

General Manager
Syro Steel
950 West 400 South
Centerville, Utah 84014

Gentlemen:

On April 2, 1982 representatives of the Division of Wildlife Resources and Brian Nelson of this Bureau visited the Syro site in West Bountiful to observe and sample the water course west of your operation. The attached analyses indicate results well in excess of Utah water quality standards. The 28-1777 mg/l of zinc and 41-246 mg/l of iron indicate substantial contamination of the waters from what aopears to be seepage from the Syro pond and operation. Also, it was observed that a major spill had occurred recently which had flowed across the adjacent field north and west of the Syro plant. This spill had apoarently entered the water course and had caused all of tne vegetation in its path to be killed or severely distressed. We can find no record of this spill being reported to us as required by state law.

In view of the above, you are hereby requested to supply to this office by May 20, 1982 an explanation of the cause of the spill and mitigative measures which have been taken to prevent future spills. Also please submit a plan of how the company intends to control the ongoing seepage of high metals contamination to waters of the state.

If you have questions regarding compliance with this notice please contact Brian Nelson of our office.

Sincerely,

Calvin K. Sudweeks, Director
Bureau of Water Pollution Control

BN:ddr
cc: EPA - Compliance Branch
Bureau of Hazardous Waste Management
Utah Division of Wildlife Resource - Rudy Drobnick
Davis County Health Department

1177